



CONDUIT AND CABLE SCHEDULE -- STAGE II & III SWITCHGEAR CONTROL & INDICATION						
CKT. DESIG.	FROM	TO	SERVICE	CDT.	WIRE	
SWITCHGEAR -- LOCAL CONTROL CABINET						
LC-1	LOCAL CONTR. CAB.	SWGR. HV-B1	CONTROL	3/4"	1-12/C #14	
LC-2	LOCAL CONTR. CAB.	SWGR. HV-B2	CONTROL	3/4"	1-12/C #14	
LC-3	LOCAL CONTR. CAB.	SWGR. HV-B3	CONTROL	3/4"	1-12/C #14	
LC-4	LOCAL CONTR. CAB.	SWGR. HV-B4	CONTROL	3/4"	1-12/C #14	
SWITCHGEAR -- INTERLOCKING BKRS. HV-B, N, & T						
I-1	SWGR. BKR. T1-3	BKR. HV-B1	240V. A.C.	1-1/2"	1-19/C #14	
I-2	SWGR. BKR. T1-2	BKR. HV-B2	240V. A.C.	1-1/2"	1-19/C #14	
I-3	SWGR. BKR. T3-4	BKR. HV-B3	240V. A.C.	1-1/2"	1-19/C #14	
I-4	SWGR. BKR. T2-4	BKR. HV-B4	240V. A.C.	1-1/2"	1-19/C #14	
I-1-2	SWGR. BKR. T1-3	BKR. T1-4	240V. A.C.	1-1/2"	1-19/C #14 & 3-1/C #14	
I-3-4	SWGR. BKR. T2-4	BKR. T3-4	240V. A.C.	1-1/2"	1-19/C #14 & 3-1/C #14	
REMOTE INDICATION						
T1-1	TRANS'F. TR-1	BKR. N-1	DIP N-1	3/4"	8 #14	
T2-1	TRANS'F. TR-2	BKR. N-2	DIP N-2	3/4"	8 #14	
T3-1	TRANS'F. TR-3	BKR. N-3	DIP N-3	3/4"	8 #14	
T4-1	TRANS'F. TR-4	BKR. N-4	DIP N-4	3/4"	8 #14	
UPS-1	U.P.S.	CB-R1	DIP R-1	3/4"	4 #14	
LC-1	LOCAL CONTROL CAB.	CB-L3	DIP L-3	3/4"	2 #14	
DIGITAL INSTRUMENT PACKAGE (DIP)						
S-1	NOTE: FOR CONNECTION SEE DWG. E-103 SCADA COMMUNICATIONS WIRING DIAGRAM			3/4"	1-2pr TW SH	
S-2				3/4"	2-2pr TW SH	
AUTOMATIC TRANSFER SW. CONTROL CDT.						
C-5	TERM. CAB. #ATS-41A	TERM. CAB. #ATS-41S	120V	1 1/4"	25 #12	
C-6	TERM. CAB. #ATS-41S	TS #41S-F	120V	3/4"	9 #14	
C-7	TERM. CAB. #ATS-41S	ATS-41SR	120V	1"	15 #12	
C-8	TERM. CAB. #ATS-41S	ATS-41SL	120V	1"	15 #12	
C-15	TERM. CAB. #ATS-41S	EXIST. J.B.	120V	3/4"	4 #12	
C-35	TERM. CAB. #ATS-41S	CB-R1	120V	3/4"	12 #12	

SEE DWG. #E-100, PANEL SCHEDULE

PANEL CP-41-S CONDUIT AND CABLE SCHEDULE					
CDT. DESIGNATION	CKT. No.	WIRE No. & SIZE	TYPE	C'DUT. SIZE	
CP-41S-1	1	2 #12	XHHW-2 GND.	3/4" C.	
CP-41S-2	2	2 #12	XHHW-2 GND.	3/4" C.	
CP-41S-7	7	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-8	8	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-9	9	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-10	10	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-11	11	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-12	12	2 #12	XHHW-2 GND.	3/4" C.	
CP-41S-13	13	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-14	14	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-15	15	2 #10	XHHW-2 GND.	3/4" C.	
CP-41S-16	16	2 #10	XHHW-2 GND.	3/4" C.	

SEE DWG. #E-97, CONNECTION DIAGRAM

NOTE:

- THIS DRAWING SHOWS BOTH STAGE II AND III WORK COMBINED. FOR SEPARATION OF WORK SEE NOTE #3 DWG. #E-25.
- FOR WORK IN ELECTRIC CLOSET "C" SEE DRAWING E-26, ONE LINE DIAGRAM
- FOR LOCAL CONTROL CABINET DETAILS SEE DRAWING E-107

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF THE CONTRACT NO. WTC-802-071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 6/21/95 *Sullivan A. Adams*
DATE 8/15/95 *Peter K. Sweeney*
ENGINEER OF DESIGN

Sheet 115 of 224

**THE PORT AUTHORITY
OF NEW YORK**

Peter K. Sweeney
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Divisions

**The World Trade
Center
Electrical/HVAC
Upgrade Program**

Title
TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION

ELECTRICAL

SUBSTATION SS-41S
STAGE II AND III
41st FLOOR PLAN
CONTROL CDT. LAYOUT

No. Date Revision Approved

This drawing is subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

LEAHY/
FISCHER
Designed by
LEAHY
Drawn by
A.S.
Checked by

Date 8-1-95 Scale AS NOTED

Contract Number Drawing Number

WTC 802.071 E-29